Annotations.

By A. J. CAMPBELL, COL. MEM. B.O.U.

NEW PARDALOTE FROM NORTH-WESTERN AUSTRALIA.—In a select parcel of bird-skins exhibited at the Melbourne annual session of the A.O.U. by Mr. H. L. White, of Scone, N.S.W., was a Pardalote resembling *P. rubricatus*, but much lighter coloured than any known species of the genus. The bird was collected by Mr. F. Lawson Whitlock in the region of the Coongan and De Grey Rivers.

If the pale-coloured plumage is a type of the species of that locality, I venture to name the bird *Pardalotus pallida*, or the Pale

Red-browed Pardalote.

Description (Female).— Forehead crossed by a narrow band of buff; crown and back of head black, each feather having a spot of white near the extremity; back of neck, back, mantle, and wing coverts light brownish-grey, each feather with a central (darker) stripe; rump buff coloured; wings brown or dark grey, margined with white; small portion of the base of the primaries and the outer margins of the secondaries yellow or deep chrome; before the eye, spot of orange chrome; above and behind the eye, stripe of buff; upper tail coverts greenish or citron yellow; tail blackish-brown, the extreme tips of the feathers being white; under surface, including tail coverts, dull white, except the chest, which is bright yellow. Dimensions in inches.—Length, 4.0; bill, 0.25; wing, 2.5; tail, 1.2; tarsus, 0.8.

The following are collector's field notes respecting the nidifica-

tion of the species:—

"This was the common Pardalote of the district. On the Coongan, wherever there were gum-trees, there its monotonous notes were sure to be heard. On the De Grey it was less common, and I heard little of it between the latter river and the coast. On the upper Coongan the main river was more favoured than the tributaries, but the nests were always in the banks of side creeks or even in little rivulets of no more than I foot or 18 inches deep. Where the soil was loamy there these rivulets had been scoured out by the heavy rains, and I could usually locate the tunnel without much difficulty. A little experience, too, soon enabled me to distinguish an old tunnel from a new onc, and also to ascertain, by means of a slender stick, the probability of the nest containing eggs or being unfinished. The tunnels varied from 20 inches to 2 feet in depth, and a chamber was excavated at the end to contain the nest. The latter was very substantial—the foundation of strips of cajaput bark and the cup neatly lined with fine grasses. The eggs were usually three in number, but not infrequently only two. As incubation is nearing the end the female sits closely, and I have several times started to dig out the nest before she flew out of the tunnel.

"The eggs are pure white, large (for so small a bird), and without much gloss. As a rule they are rather broad ovals."

[A clutch of three eggs in Mr. White's collection, taken by

Mr. Whitlock (29/8/08), measure in inches respectively—(1).72 x.57; (2).72 x.55; (3).72 x.55.—A. J. C.]

GYMNORHINA LONGIROSTRIS (Milligan), (Long-billed Magpie).—Mr. White also exhibited at the above-mentioned session a series of 10 sets of these new eggs—2 singles, I pair, 4 each 3, and 3 each 4—collected near the Coongan River, North-Western Australia, by Mr. Whitlock. There is not much variation in the eggs, which mostly resemble the "c" variety* of G. tibicen. Description.—Ground colour greyish-green, moderately marked with roundish blotches and spots of chestnut and purplish-brown. In two sets the markings almost covered the whole surface. Texture of shell somewhat coarse, surface slightly glossy. Dimensions in inches.—A—(I) I.56 x I.I, (2) I.53 x I.06, (3) I.52 x I.05, (4) I.5 x I.03; B—(I) I.52 x I.05, (2) I.5 x I.05, (3) I.49 x I.06.

Pachycephala lanioides (White-bellied Thickhead).—In my book (p. 328) I mentioned that Gould founded this species upon a single specimen procured on the north-west coast, that no information whatever had been (up to date) obtained respecting the habits and nidification of this rare bird, and asked—"Who will be the first field naturalist to fill up the hiatus?" By the indomitable perseverance of Mr.Whitlock in wading through the pestilential mangrove quagmires of the North-West collecting for Mr.White the question has been answered.

Let Mr. Whitlock give his own interesting account:--

"As far as my knowledge at present goes this appears to be a coastal species. I have only met with it in the mangrove thickets at Condon; but on arrival at Port Hedland I slept on board a small coasting boat in the estuary there, and at early dawn I could hear the loud, joyous notes of this Thickhead from the

mangroves about a third of a mile away.

"At Condon my attention was soon attracted by this bird; and, being acquainted with the song of other species of Thickheads, I had little doubt as to what class the bird belonged. There is one main estuary running inland for perhaps a mile and a half, but with numerous side creeks. The rise and fall of the spring tides amounting to a little over 20 feet, the foreshores of the beach and main creek are all lined with mangrove thickets, and the same is the case with the banks of the tributary creeks. But it is only in the estuary the present species is to be met with, the mangroves of the open beach, despite their more extensive area, being quite untenanted.

"On the eastern side of the estuary I commenced my search, as I could hear the loud notes resounding from a thicket where the mangroves were tall and more slender, and quite a quarter of a mile away. To reach the spot it was necessary to cross the main creek at low tide; and the slippery, tenacious mud made the walking the reverse of pleasant. I tried to steal upon the songsters

without disturbing them, but the mangroves were too thick, and the only result was the sudden cessation of the song. I then resorted to the artifice of imitating the cry of a bird in distress, and in a few seconds the male, followed by the female, was within a few feet of my head. One glance was sufficient to recognize the species, the birds being not in the least timid. After admiring the male, I turned my attention to the brown and boldly striped female, in the hope of getting a clue to the locality of the nest. She presently slipped away, but it was quite impossible to follow her with the eye—the vegetation was too thick, the light very deceptive, and the swarms of sand-flies and mosquitoes were quite blinding. I commenced a systematic search in what I considered the most likely parts of the thickets. After considerable trouble I found a nest, unmistakably a Thickhead's, where the mangroves were very dense and mere saplings. It was about 8 feet from the mud, and contained one fresh egg. In passing, I may remark that this was the only nest I could reach without climbing. The egg was true to type—ground colour dark cream, or even stone colour, darker than eggs of P. occidentalis, P. rufiventris, or P. falcata; the spots chiefly at the larger end, and of a clouded neutral tint. I subsequently found the colour of the spots varied much in intensity. The nest was flat and not very substantial. Outside measurements between 5 and 6 inches, the cup neatly finished, but the egg visible from below. The fate of this egg is a mystery. I left it undisturbed, in the hope of securing a full clutch; but when I returned three days later the nest was empty. I charged a Malay boy who was crabbing in the creek with tracking me up and taking the egg. He denied it flatly, and I believe truthfully. Crows were very scarce, and lizards and snakes still scarcer. Can either of the parents have resented my handling the egg and have removed or destroyed it themselves? This was very disappointing, but all that could be done was to find another, and I had the encouragement, too, that in searching for nests of the present species I had a chance of finding nests of Zosterops lutea and other species present in the mangroves. After being nearly eaten alive by the insect pests, and after several disappointments in finding nests with newly-hatched young, I succeeded in getting three more nests with eggs-in two cases quite fresh, and in the third considerably incubated. In addition, I found three nests in course of construction. All these nests were where the mangroves were tallest, and generally where they were most dense. The highest nest I climbed to was quite 15 feet from the mud below. All this was only accomplished at the expenditure of much labour and discomfort, and at the risk of an attack of malaria. My worst experience was at low tide, before sunset, when the bad odour from the mud was quite perceptible. It is advisable to mark the site of an empty nest with a strip of red rag if it is to be readily rediscovered. I tried white wadding, and to my cost found it useless and quite invisible at a short distance, owing to the infiltration of the innumerable rays of light through the foliage of the mangroves overhead, the next tide, of course, washing out all previous tracks.

"As a rule the male sings at no great distance from the nest, but he takes no part in building, or even in feeding the young. His business in life is chiefly song, but he warns the female at the approach of an intruder, and I found she flew from the nest towards me as I approached. The call note is a soft, clear whistle, with just the suspicion of a falling cadence at the end of it. The alarm note is somewhat sharp and harsh; the song very loud, clear, and musical, and is poured forth in an impetuous and joyous manner, characteristic of the genus. The male sang quite without fear within a few feet of my head. The female, too, responds, but her efforts are comparatively feeble, but for all that not unpleasing.

"I had a glimpse of one nestling, but could neither eatch it nor shoot it without blowing it to pieces. It appeared to be somewhat mottled on the upper part, and was heavily striped on the

breast.

"In no case did I find more than two eggs or young. In a single instance the nest contained but one newly hatched bird."

The egg may be described thus:—Oval in shape; texture of shell fine; surface glossy; colour light olive, with a moderately marked belt of umber or olive brown and dull (underlying) spots. Dimensions in inches—(1) 1.04 x .73, (2) 1.0 x .73.

It will be observed that the eggs resemble the P. rufiventris and

P. falcata type, and are next in size to those of P. olivacca.

STREPERA GRACULINA (Pied Crow-Shrike). — At the Bird Observers' Club's dinner given on the 23rd of November in honour of the official (inter-State) delegates attending the Bird Protection Conferences in connection with the annual (Melbourne) session of the A.O.U., a fine series of these eggs, exhibited by Mr. H. L.

White, Scone, N.S.W., graced the table.

Until recently Mr. White had difficulty (chiefly on account of the inaccessible sites of nesting) in adding to his collection the eggs of this bird, which is fairly numerous in his district—Upper Hunter River. The eggs displayed great variation of ground colouring, from pale purplish to rich vinaceous buff, either blotched and spotted with uniber and dull purplish slate or rich chestnut or reddish-brown. Dimensions in inches.—A—(I) I.93 x I.24, (2) I.71 x I.14, (3) I.71 x I.15, (4) I.7 x I.16; B—(I) I.6 x I.15, (2) I.6 x I.13, (3) I.59 x I.13, (4) I.59 x I.13.

A typical nest is composed of sticks and twigs lined with finer

rootlets. Inside dimensions, 6 inches across by 3 inches deep.

I cull the following from Mr. White's field notes:-

"During the third week of September one of my men reported having seen a nest of the 'Currawang' (Strepera graculina), with the bird sitting, and that, although situated in a very bad place, it might possibly be reached with a long scoop. Being very busy with shearing, I could not get away at the time, but on the 30th of the month a fall of snow delayed work for a day, so,

armed with a 20-foot bamboo, and accompanied by two boys, I determined to secure a clutch of these rare eggs if possible. I found the nest to be about 35 feet up in an apple (Angophora) tree, on a very thin horizontal limb, projecting over a precipice which formed one side of a scrubby, rocky ravine - a most dangerous position for climbing. I sent one of the boys up a limb overlooking the nest, and was agreeably surprised upon hearing him exclaim—' Four eggs,* and one of them a whopper.' The second boy and the scoop were now sent up. No. I boy could not manage the long rod by himself, so No. 2 assisted. After half an hour's hard work the four eggs were safely landed and the nest secured. During the operation both birds continued to fly about quite close to us, uttering their loud, harsh cries of alarm or anger.

"Of some dozens of Strepera graculina nests observed in this locality. I have not seen one in a reasonably accessible position; the few clutches of eggs obtained were taken with great difficulty, and always by the aid of a very long scoop-rod."

Collocalia francica (Grey-rumped Swiftlet).—One of the most important oological items of the season has been the discovery by Mr. E. J. Banfield of a colony of these Swiftlets nesting in a cavern on his verdure-clad islet—Dunk—near Cardwell, North Queensland, the very island where Macgillivray in the Rattlesnake procured a bird many years ago. Subsequently, similar birds were obtained on the mainland opposite, and named by Dr. E. P. Ramsay C. terræ-reginæ. This name may stand yet.

Nest.—Small, basket shaped, composed of fine dry grass and thread-like fibre, sometimes a few feathers or pieces of green moss added, all firmly cemented together and adhering by the side to the wall of a cave. Dimensions, 2 to 2½ inches across by about

3-inch deep.

Egg.—Clutch, one; elliptical in shape; texture of shell very fine; surface slightly glossy; colour pure white. Dimensions in

inches—(a) .81 x .5; (b) .82 x .53.

Mr. Banfield has obligingly forwarded the following interesting observations: - "My discovery this day (18/11/08) of a colony of the Grey-rumped Swiftlet enables me to send by parcel post nests (2), eggs (3), and unhatched chick in formalin solution. On 17th September last (as I advised you) I found an incomplete nest in a gloomy cave on one of the highest points of the island, from which fragment you guessed the identity of the builder. A succession of adverse circumstances prevented further investigations until to-day. I was fearful that the breeding season in the meantime might have passed; but, as the birds are among the permanent residents, I concluded that a sample of a complete nest might be procured, even though the rearing of families was over.

^{*} In "Nests and Eggs" (p. 58) I give the clutch for this species as 2-3. The maximum should be raised to 4, since Mr. White observed several other nests containing that number.

"On this occasion I went to a locality where I had often seen the Swifts darting among huge blocks of granite a few feet above high water mark on the weather side of the island. They were plentiful and very active, but no nests were to be seen in the crevices I considered favourable. When, however, we began to explore a darksome cavern well hidden in the jungle, the excited fluttering of invisible birds revealed a hitherto well-kept secret. When our eyes became accustomed to the dimness we saw that the roof of the cave (which is fairly smooth and regular, with an inclination of about 30 degrees) was studded with nests. counted 53, placed irregularly about the middle of the cave; none on the walls. Some nests were apparently not quite finished: twenty contained a single white egg each; none contained young. All were adherent to the roof by a semi-transparent white substance resembling isinglass, with which also the grass, tendrils. and bark composing the nests were consolidated. The vegetable material of which the first nest found (17th September) was made was quite green and the gluten moist and sticky. Those of to-day were hard—glued into solidity. After the first fright the birds became very quiet and confiding. A young one flew into my hand. and I detained it for a while without a struggle. Another tried to snoodle into the shirt-pocket of the blackboy who accompanied me. Several brushed against our faces. The weather was rather cloudy, and what with the screen of foliage and the prevailing gloom of the cavern we could not always distinguish the nests. When the sun shone brightly they were all readily discernible, those with the single white egg looking very quaint. As they flitted in and out of the cavern the birds were as noiseless as butterflies, save when they wheeled to avoid each other. Those which were brooding, as they flitted over their nests and clung to the edges, uttered a peculiar note, hard to render into words. To my ears it seemed a blending of cheeping, clicking, and chattering, yet metallic, and not very unlike the quick winding up of a clock. One bird flew to her nest a foot or so from my face, and clung to it. To test its timidity or otherwise I approached my face to within 2 inches of her, but she continued to scrutinize me at even these close quarters with charming assurance. Then I gently placed my hand over her. She struggled gently for a few seconds and then remained passive, her bright eyes glinting in the gloom. She was a dusky little creature, the primaries, the back of the head, neck, shoulders, and tail being black, but when the wings are extended for flight the white down at the base of the tail is very conspicuous. After a few minutes I put her back in the nest and she clung to it, having no fear of me. I noticed that the beak was very small, the gape very large; the legs short and the toes slender. We remained in the cave for about half an hour, throughout which time the birds came and went, indifferent to our presence.

"In the interests of science, but to the violence of my own sentiments, I secured two specimens of the nests and four eggs for you. One egg was quite fresh; one had just germinated; the incubation of the third was well advanced; the fourth contained a live chick. It is interesting to note that, while many young birds were fluttering about in the cave, though there were none in the nests, the eggs were in successive stages of incubation. The architecture of the nests, the way in which they were attached to the roof, and the attitude of the birds clinging to and brooding over them, resembled the picture in Richard Kerr's book—'Nature, Curious and Beautiful'—of the Swifts (Collocalia) which build the edible nests, which picture reproduces an exhibit in the Natural History Museum, London. True, the shape of the nests does not exactly correspond, though the scoop-like general appearance is preserved.

"The cave, which is invisible from the sea, is only about 30 feet above high water mark, and the entrance which the birds favour is, strange to say, averse from the sea and much obscured by leafage. Altogether the incidents connected with this experience were very

pleasant."

Notes on the Migration of Apus (Micropus) pacificus, Lath.

By Robert Hall, C.M.Z.S., Col. M. B.O.U.

WHILE in Vladivostock in May, 1903, I became aware of the presence of thousands of birds, filling the stormy night air with loud and terrified call notes.

Lieut.-Colonel Lochvitsky informed me that it was the usual time for the migration movement of Ducks, Swifts, waders, and other birds northwards. It is said to be noticeable by all the people, as if the birds were directly upon a defined migration course. Russian block calendar of 13th May (= English 26th May) makes a definite statement to the effect that the Swifts arrive at Vladivostock from the south, and travel northwards. Australian White-rumped Swift does actually pass at that time. I found it nesting in large numbers in the perpendicular cliffs of the River Lena, about one hundred miles down the river from Vitim, on 16th June. On 27th June, 1903, in Yakutsk, lat. 62° N., I found it nesting under the verandah of the market place. The birds were not seen further north, although the cliffs were good for the purpose of nesting, and food seemed plentiful. My companion, Mr. Trebilcock, and I travelled a further 1,200 miles down the river to the delta, and saw nothing more of them. Yakutsk, in 1903, was the northern end of their wonderful journey, so far as that tract of Siberia was concerned. I had not been able to land and examine the nests in the cliffs further up the river. Now, it seemed just a matter of care to take the number of eggs and young from the market-place that would satisfy the Australian collector. However, care was not the word to fit the occasion, for every Russian has an almost religious belief in the utilitarian value of the Swift and Swallow. On one occasion a burly Russian